

WHAT IS CLAIMED IS:

1. A front transaxle device provided to a multi-wheel-driving vehicle, comprising:
 - an input shaft for receiving power;
 - a pair of left and right front axles supported in said front transaxle device;
 - a differential connecting said left and right front axles in a differential manner;
 - a pinion shaft;
 - a clutch device which engages and disengages said pinion shaft with or from said input shaft;
 - a rotary object which intervenes between said differential and said pinion shaft; and
 - a brake device which brakes said rotary object.
2. The front transaxle device as set forth in claim 1, wherein said brake device comprises:
 - a piston which can be moved hydraulically;
 - friction objects which engage with each other by the force of said piston; and
 - a mechanism which keeps a constant stroke of said piston necessary to make said friction objects start engaging with each other regardless of abrasive reduction of said friction objects.
3. The front transaxle device as set forth in claim 1, wherein said rotary object is a middle shaft disposed between said pinion shaft and said differential and supported parallel to a rotational axis of said differential, and said middle shaft is engaged with said differential through spur wheels.

4. A front transaxle device provided to a multi-wheel-driving vehicle comprising six or more wheels, supporting a pair of foremost wheels of said vehicle, said pair of foremost wheels being able to be driven, wherein a transmission provided to said vehicle is connected with said front transaxle device through a clutch device which is engaged when a brake operating means provided to said vehicle is operated to brake.

5. A brake system of a multi-wheel vehicle, said multi wheel vehicle comprising:

a pair of first drive wheels disposed at one of front and rear portions of the vehicle;

a pair of second drive wheels disposed at the other rear or front portion of the vehicle, wherein at least either said pair of first drive wheels or said pair of second drive wheels are steerable;

a first transaxle including, a pair of first axles connected to said respective first drive wheels, a first differential section differentially connecting said first axles to each other, and a PTO section for taking off rotational force synchronous with the rotation of said first axles; and

a second transaxle including, a pair of second axles connected to said respective second drive wheels, a second differential section differentially connecting said second axles to each other, and an input section for transmitting the rotational force of said PTO section of said first transaxle to said second differential section, said brake system comprising:

a pair of first brake devices for braking said respective first axles;

a second brake device for braking said input section of said second transaxle; and

a common brake operation device operatively connected to said pair of first brake devices and said second brake device so that said pair of first brake devices and said second brake device are simultaneously actuated for braking by operating said common brake operation device.

6. The brake system as set forth in claim 5, wherein said second brake device is selectively put into one of first and second modes:

said first mode for still keeping said second brake device in unbraking condition when said common brake operation device is operated for braking; and

said second mode for actuating said second brake device for braking.

7. The brake system as set forth in claim 5, wherein said pair of first brake devices and said second brake device are hydraulically controlled with oil-supply from a common master cylinder operated by said common operation device.